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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,005	03/08/2001	Helena Lindskog	34650-00597USPT	6221

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EXAMINER

HAYES, JOHN W

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,005

Applicant(s)

LINDSKOG ET AL.

Examiner

John W Hayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (See specification, page 17, line 21 and page 20, line 4). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the wireless device" in line 7, "the data" in line 9 and "the data" in line 12. There is insufficient antecedent basis for these limitations in the claim.

Claim 2 recites the limitation "the data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Epstein, U.S. Patent No. 6,453,416 B1.

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As per **Claim 10**, Epstein discloses a mobile electronic transaction personal proxy device, comprising:

- a first interface with a merchant computer (Figure 1);
- a second interface with a web browser (Figure 1);
- a third interface with a mobile electronic transaction device (Figure 1);
- control logic (Figure 1) configured to:
 - a. notifying the web browser of a request for a digital signature from the merchant computer (Col. 4, lines 57-61; Col. 5, lines 4-9; Col. 6, lines 60-63);
 - b. request a data string be digitally signed by the mobile electronic transaction device (Col. 2, lines 40-45; Col. 6, lines 5-11; Col. 7, lines 45-48);
 - c. receive a digitally signed data string from the mobile electronic transaction device (Col. 2, lines 40-45; Col. 6, lines 5-11 and 20-27; Col. 7, lines 45-48);
 - d. notify the web browser of the digitally signed data string (Col. 3, lines 15-21; Col. 6, lines 20-27; Col. 7, lines 47-51); and
 - e. forward the digitally signed data string to the merchant computer (Col. 6, lines 20-27; Col. 7, lines 47-51).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein, U.S.

Patent No. 6,453,416 in view of Wiehler, WO 98/57510, published 17 December 1998.

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As per Claim 1, Epstein discloses a method for obtaining a digital signature comprising the steps of:

- receiving a request for a digital signature during an electronic transaction (Figure 2; Col. 5, lines 4-9; Col. 6, lines 60-63);
- notifying a web browser of the request for the digital signature (Col. 4, lines 57-61; Col. 5, lines 4-9; Col. 6, lines 60-63);
- obtaining the digital signature from the wireless device (Col. 2, lines 40-45; Col. 6, lines 5-11; Col. 7, lines 45-48);
- appending the digital signature to the data (Col. 2, lines 40-45; Col. 6, lines 5-11 and 20-27; Col. 7, lines 45-48);
- notifying the web browser the digital signature has been obtained (Col. 3, lines 15-21; Col. 6, lines 20-27; Col. 7, lines 47-51); and
- transmitting the data with the appended digital signature to a requesting party (Col. 6, lines 20-27; Col. 7, lines 47-51).

Epstein discloses that the device for generating the digital signature is a smart card in possession of the user and that this smart card is associated with a smart card reader. Thus, the smart card signing device of Epstein is not wireless. Although certain types of smart cards such as proximity cards or RF cards may be wireless devices, Epstein does not specifically disclose this. Wiehler discloses a mobile radio telephone used in conjunction with a chip card that enables the mobile radio telephone to generate digital signatures and wherein the mobile radio telephone is coupled to a user computer through an interface (Abstract; Figure 1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Epstein and generate the digital signature using a wireless device such as a mobile radio telephone as taught by Wiehler and forward the digital signature from the wireless mobile radio telephone to the computer via a short range wireless connection. Epstein provides motivation by indicating that the principles of the invention are equally applicable by using other proxy signing devices such as proxy signing servers for producing digital signatures (Col. 4, lines 10-15). Thus,

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in view of this suggestion by Epstein, it would have been obvious to use other signing devices such as a mobile radio telephone instead of the smart card signing device taught by Epstein.

As per Claim 2, Epstein further discloses forwarding the data to an application within the computer (Figure 2; Col. 6, lines 52-67) and forwarding the digital signature to the computer from the device (Col. 7, lines 45-50). Epstein, however, fails to further disclose establishing a short range wireless connection between the computer and the wireless device and forwarding the digital signature via the short-range wireless link. Wiehler discloses a mobile radio telephone used in conjunction with a chip card that enables the mobile radio telephone to generate digital signatures and wherein the mobile radio telephone is coupled to a user computer through an interface (Abstract; Figure 1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Epstein and generate the digital signature using a wireless device such as a mobile radio telephone as taught by Wiehler and forward the digital signature from the wireless mobile radio telephone to the computer via a short range wireless connection in order to avoid any additional hardware such as a physical wired interface.

As per Claim 6, the references fail to disclose periodically reloading a web page notifying the customer of the request for the digital signature. Examiner takes Official Notice that periodically reloading web pages to notify users of certain requests is well known in the art and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to periodically reload the web page to remind the user that data is still being requested.

8. Claims 3-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein, U.S. Patent No. 6,453,416 and Wiehler, WO 98/57510, published 17 December 1998 as applied above, and further in view of Knauff et al, U.S. Patent No. 6,654,754 B1 and Franks et al, "HTTP Authentication: Basic and Digest Access Authentication, RFC-2617, June 1999.

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As per **Claims 3-5**, Epstein and Wiehler fail to specifically disclose the step of recognizing a command within the request for a digital signature. Knauff et al disclose a system of dynamically generating an electronic document and providing access to a resource by a user. Knauff et al further disclose that the user may be authenticated by issuing commands within an HTTP request for user authentication (Col. 14, lines 1-10). Franks et al further disclose the use of a WWW-Authenticate header containing a command requesting authentication from the user as well as data to be digitally signed and a URL for the response (see paragraphs 3.2.1-3.2.2.5 and 4.1). Thus, It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Epstein and Wiehler and provide the ability to request user authentication using the teachings of Knauff et al and Franks et al in order to authenticate the user over a WWW interface using the well known and effective HTTP protocol.

As per **Claims 7-8**, Epstein discloses a method for obtaining a digital signature in a transaction between a computer of a customer and a merchant comprising the steps of:

- receiving a request for a digital signature from the merchant during an electronic transaction (Figure 2; Col. 5, lines 4-9; Col. 6, lines 60-63);
- recognizing a data string to be digitally signed within the request (Col. 2, lines 40-45; Col. 5, lines 4-9; Col. 6, lines 60-63);
- notifying a web browser of the request for the digital signature (Col. 4, lines 57-61; Col. 5, lines 4-9; Col. 6, lines 60-63);
- forwarding the data string to an application within the computer (Col. 2, lines 40-45; Col. 5, lines 4-9; Col. 6, lines 60-63);
- obtaining the digital signature from the wireless device (Col. 2, lines 40-45; Col. 6, lines 5-11; Col. 7, lines 45-48);
- appending the digital signature to the data string (Col. 2, lines 40-45; Col. 6, lines 5-11 and 20-27; Col. 7, lines 45-48);

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- notifying the web browser the digital signature has been obtained (Col. 3, lines 15-21; Col. 6, lines 20-27; Col. 7, lines 47-51); and
- transmitting the data with the appended digital signature to a requesting party (Col. 6, lines 20-27; Col. 7, lines 47-51).

Epstein discloses that the device for generating the digital signature is a smart card in possession of the user and that this smart card is associated with a smart card reader. Thus, the smart card signing device of Epstein is not wireless. Although certain types of smart cards such as proximity cards or RF cards may be wireless devices, Epstein does not specifically disclose this. Wiehler discloses a mobile radio telephone used in conjunction with a chip card that enables the mobile radio telephone to generate digital signatures and wherein the mobile radio telephone is coupled to a user computer through an interface (Abstract; Figure 1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Epstein and generate the digital signature using a wireless device such as a mobile radio telephone as taught by Wiehler and forward the digital signature from the wireless mobile radio telephone to the computer via a short range wireless connection. Epstein provides motivation by indicating that the principles of the invention are equally applicable by using other proxy signing devices such as proxy signing servers for producing digital signatures (Col. 4, lines 10-15). Thus, in view of this suggestion by Epstein, it would have been obvious to use other signing devices such as a mobile radio telephone instead of the smart card signing device taught by Epstein.

Epstein and Wiehler further fail to specifically disclose the step of recognizing a command within the request for a digital signature and forwarding the digital signature to a URL included in the request. Knaft et al disclose a system of dynamically generating an electronic document and providing access to a resource by a user. Knaft et al further disclose that the user may be authenticated by issuing commands within an HTTP request for user authentication (Col. 14, lines 1-10). Franks et al further disclose the use of a WWW-Authenticate header containing a command requesting authentication from the user as well as data to be digitally signed and a URL for the response (see paragraphs 3.2.1-3.2.2.5 and 4.1). Thus, It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Epstein and Wiehler and provide the ability to request user

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authentication using the teachings of Knauft et al and Franks et al in order to authenticate the user over a WWW interface using the well known and effective HTTP protocol.

As per **Claim 9**, the references fail to disclose periodically reloading a web page notifying the customer of the request for the digital signature. Examiner takes Official Notice that periodically reloading web pages to notify users of certain requests is well known in the art and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to periodically reload the web page to remind the user that data is still being requested.

Conclusion

9. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jobst et al disclose a system for data transfer verification and teach the generation of a digital signature in a wireless phone using a secret key
- Geiger et al disclose a secure wireless electronic-commerce system with wireless network domain and teach the use of a client wireless device with a SIM that holds the subscriber identity and authentication information for use in generating digital signatures
- Binding et al disclose a system for establishing security parameters that are used to exchange data on a secure connection and teach the use of a HTTP WWW-authenticate header as a means for a server to

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request additional information from the client for purposes of authentication before the server will complete the client's request for access

- Honkanen et al [WO 98/28877] discloses a method for identification of a data transmission device such as a wireless terminal
- Ketcham [WO 98/37661] disclose an apparatus for authentication and encryption of a remote terminal over a wireless link
- Naccache discloses a method for the generation of electronic signatures in smart cards
- Wheeler et al disclose a system for conducting transactions using digital signatures and teach validating a transaction by applying a hashing algorithm to an electronic message and comparing the results to the results of applying the public key to the digital signature received and wherein the digital signature is derived within a senders smart card

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (703)306-5447. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

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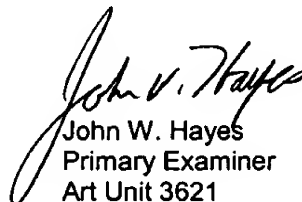
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John W. Hayes
Primary Examiner
Art Unit 3621

April 29, 2004